

**REMARKS:**

This application is amended in a manner to place it in condition for allowance at the time of the next Official Action.

**Status of the Claims**

Claims 1-6 are cancelled.

Claims 7-20 are new and are directed to the originally presented claims as follows:

Claim 7 corresponds to claim 1 and page 2, lines 33-36 and page 3, line 1. Also, the expression "a gluten reducing agent" is described on page 5, lines 27-28.

Claims 8-10 correspond to claims 2, 3 and 6, respectively.

Claims 11-13 correspond to the features of claim 5.

Claim 14 corresponds to claim 4 and page 2, lines 33-36 and page 3, line 1.

Claims 15-17 correspond to claims 2, 3 and 6, respectively.

Claims 18-20 correspond to the features of claim 5.

Claims 7-20 remain in this application.

**Objection to the Specification**

The Official Action objected to the specification for not including a brief description of the drawings, as well as the other subsection headings themselves.

The specification has been amended accordingly. (See "Amendments to the Specification".) No new matter has been added.

Therefore, withdrawal of the objection is respectfully requested.

**Claim Rejections-35 USC §112**

Claims 1-6 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite. This rejection is respectfully traversed for the reasons below.

New claims 7-20 recite the features in a definite manner. For example, the claims do not recite a baking dough, but rather a dough and a baking product. The improving agent is now defined as being selected from a defined group of agents to clarify its meaning. The expression "alone or mixed together" has been removed from the claims.

Therefore, claims 7-20 are definite.

Claims 3 and 6 were rejected under 35 U.S.C. §112, first paragraph, for not complying with the enablement requirement. This rejection is respectfully traversed for the reasons below.

New claims 9 and 10 correspond to claims 3 and 6, respectively.

The specification discloses the specific branched maltodextrins as claimed (see in the specification as filed page 6 lines 14 to 35) and expressly refers to the patent application EP 1,006,128, which discloses how to make this branched maltodextrin. The European patent application EP 1,006,128 has an equivalent in the US: the US Patent 6,630,586 - FOUACHE et al - granted in 2003, which was cited in the IDS of May 24, 2010.

Thus, new claims 9 and 10 comply with the enablement requirement.

**Summary of the Invention Defined in Claims 7-20**

The claimed invention relates to a method for producing baked products. Specifically, the method comprises the step consisting of forming a dough containing:

- gluten,
- at least 15% of water,
- from 3 to 15 wt.%, relative to the weight of the dough, of an improving agent selected from the group consisting of maltodextrins, pyrodextrins, polydextrose, oligosaccharides and mixtures thereof,
- from 0.005 to 1 wt.%, relative to the weight of the dough, of a gluten reducing agent selected from the group consisting of cysteine, glutathione, deactivated dried yeast and bisulfite, and
- optionally a raising agent.

The dough is free of ascorbic acid.

This specific combination of the improving agent and of the reducing agent in the claimed concentration range leads to the following advantages:

- The addition of chemical improving agents, like ascorbic acid, is no more required.

- The method is simple, because the addition of the improving agent is completed at the beginning of the process. No complex operation, like in the prior art, is required, for example: pre-treatments, a hard manipulation...etc.

- The time of proofing, i.e. the time during which the dough is rising, is reduced with respect to the prior art.

The claimed process is efficient, as demonstrated in example 2 (page 14 line 26 to page 15 line 12 of the specification).

#### **Claim Rejections-35 USC §103**

Claims 1-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over BRENDÉL et al. 2002/0192344 (BRENDÉL) in view of FUCHS et al. US 6,291,005 (FUCHS). This rejection is respectfully traversed for the reasons below.

BRENDÉL teaches a process for preparing food with reduced calorific value using a particular saccharide as substitute for high-calorie substances. In example 6, BRENDÉL discloses a method for preparing traditional bread, comprising

the step of forming a dough containing wheat flour (gluten), 60% of water, and 6.5% of branched maltodextrin as improving agent. The dough also contains 0.013% of amylase. The dough does not contain a gluten reducing agent.

FUCHS discloses a baking additive for use in the baking industry. The baking additive has particular appreciable physical properties (i.e. pumpable, homogenous and microbiologically stable for a long period of time). FUCHS discloses all the ingredients which are commonly used as baking additives: thickeners (col.2 1.17-22), sugars (col.2 1.23-30), milk products (col.2 1.31-36), edible oils and edible fats (cl.2 1.37-41), acids and salts (col.2 1.42-58), fiber substances (col.2 1.59-64), and enzymes such as amylases, proteases and lipoxxygenases (col.2 1.65-67).

As proteases are no longer included in the gluten reducing agent in the new set of claims, the combination does not teach the claimed gluten reducing agent.

Moreover, in example 6 of BRENDDEL, the dough further contains ascorbic acid, which acts contrary to a gluten reducing agent. Indeed, it reinforces the gluten network (see page 2 lines 26-33 of the present specification). Accordingly, the skilled person would not have added any gluten reducing agent into the dough of example 6.

Therefore, claims 7-20 are not rendered obvious by BRENDDEL and FUCHS.

Claims 1-2, 4-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over THOMAS et al. US 6,217,930 (THOMAS) in view of ATSUMI US 4,405,648 (ATSUMI) and CRAIG et al. US 4,005,225 (CRAIG). Claims 3 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over THOMAS in view of ATSUMI and CRAIG, further in view of BRENDDEL. These rejections are respectfully traversed for the reasons that follow.

THOMAS discloses no fat or reduced fat baking compositions containing sodium bicarbonate as leavening agent. The method for making these baking compositions comprises the preparation of a dough which may contain a fat replacer, which may be maltodextrin, in an amount for example of about 0.10 to about 10 wt.%, preferably about 0.5 to about 5 wt.%, of the unbaked composition.

THOMAS, however, does not disclose the use and amount of reducing agent as claimed.

ATSUMI discloses a method for producing bread of good quality, by kneading a dough together with three additives, namely, a L-ascorbic acid, a reducing agent and a thickening agent (see col.1 l.18-26).

CRAIG discloses an improved dough developer composition in the form of a dry mixture, comprising (a) 0.003 to 0.009% of an amino acid reducing substance containing free sulfhydryl groups, (b) 0.005 to 0.015% ascorbic acid and (c) 0.030 to 0.060% monocalcium phosphate. Amino acids containing free sulfhydryl

groups include compound selected from the group consisting of cysteine and glutathione, or combinations of these ingredients. The position of the Official Action was that it would have been obvious to one skilled in the art to add a known reducing agent (such as cysteine, glutathione...etc.) as taught in ATSUMI or CRAIG to improve the extensibility, reduce elasticity and shorten mixing time in the method as taught in THOMAS.

However, it was not obvious for the skilled person to use the teaching of THOMAS.

Indeed, THOMAS solves the problem of the loss of quality in a baked product resulting from no fat or reducing fat composition. The present invention relates to a method for producing baked product with a simple process, in usual conditions or even in simplified conditions, without requiring the slightest complex operation.

Moreover, even if the skilled person had used the teaching of THOMAS, and had combined it with the teachings of ATSUMI and CRAIG, the skilled person would not have arrived to the present claimed invention.

According to ATSUMI and CRAIG, the reducing agent must always be used together with other additives, and specifically with ascorbic acid. Indeed:

- In ATSUMI, the examples in table I and table II proves that the presence of the tree additives

(i.e. L-ascorbic acid, cysteine and xanthane gum) is essential to obtain a product with good quality.

- In CRAIG, it is specified that the invention is based on the discovery that very small levels of monocalcium phosphate, added in proper combination with ascorbic acid and the amino acid reducing substance, provide a solution to the technical problem (see col.5 1.26-32). It is further specified that the relatively narrow range of ascorbic acid is likewise critical to the successful use of the developer composition (see col.5 1.50-53).

Therefore, if the skilled person had combined the teaching of THOMAS with the teachings of ATSUMI and CRAIG, he would necessarily have added ascorbic acid into the dough to be baked.

On the contrary, the present invention relates to baked products without any chemical improving agent, especially without ascorbic acid.

Therefore, new claims 7-20 are not obvious over THOMAS in view of ATSUMI and CRAIG.

BRENDEL is not able to remedy the shortcomings of THOMAS, ATSUMI and CRAIG for references purposes, and, thus, new claims 7-20 are not obvious over THOMAS in view of ATSUMI and CRAIG, further in view of BRENDEL.

Claims 1-2, 4-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over KILIBWA US 6,217,930(KILIBWA) in view of ATSUMI US 4,405,648 (ATSUMI) and CRAIG et al. US 4,005,225 (CRAIG).Claims 3 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over KILIBWA in view of ATSUMI and CRAIG, further in view of BRENDDEL. These rejections are respectfully traversed for the reasons that follow.

KILIBWA discloses bakery products which include betaine (= trimethylglycine). The presence of betaine allows retarding moisture migration, retaining moisture in a baked good, increasing the shelf life of baked goods and improving the organoleptic qualities thereof.

KILIBWA, however, does not disclose the use and amount of reducing agent as claimed.

ATSUMI and CRAIG fail to remedy this shortcoming, for reference purposes, for the same reasons discussed relative to THOMAS. Similarly, BRENDDEL is also unable to remedy the deficiencies of the combination of KILIBWA, ATSUMI and CRAIG for reference purposes.

Therefore, new claims 7-20 are not rendered obvious by either KILIBWA, ATSUMI and CRAIG or KILIBWA, ATSUMI and CRAIG, further in view of BRENDDEL.

**Double Patenting Rejection**

Claims 1-6 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application 11/993,025.

As the present application is the earlier filed application, it is respectfully requested that the rejection be withdrawn.

As stated in MPEP 804 I B, if the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. If, however, the ODP rejection is the only rejection remaining in the later-filed application, while the earlier-filed application is rejectable on other grounds, a terminal disclaimer must be required in the later-filed application before the rejection can be withdrawn.

**Information Disclosure Statements**

The Official Action requested that Applicant provide copies of the foreign and NPL documents from the Search Report of the PCT Application, from which this application is the National Stage, cited in the IDS of August 11, 2006. These copies are provided in the appendix of this response.

Also provided in the Appendix is an English translation of the of the Chinese publication "Journal of the Chinese Cereals an Oils Association, Vol. 9, No. 1, March 1994, pp. 23-29", which has been cited in the Supplementary IDS of July 14, 2009.

Therefore, consideration of the documents cited in the IDS of August 11, 2006 and July 14, 2009 is respectfully requested.

**Conclusion**

In view of the amendment to the claims and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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**APPENDIX:**

The Appendix includes the following item(s):

- EP 0 463 935
- WO 96/39849
- EP 0 435 606
- PATENT ABSTRACTS OF JAPAN, vol. 2000, no. 19, 5 June 2001 (2001-06-05) -&JP 2001 045960 A (MATSUTANI CHEM IND LTD), 20 February 2001 (2001-02-20) cited in the demand at lines '0011, '0012, '0014, '0017, '0018; claims 1-5;
- PATENT ABSTRACTS OF JAPAN, vol. 1998. no. 09, 31 July 1998 (1998-07-31) & JP 10 084844 A (KAO CORP), 7 April 1998 (1998-04-07);
- 1988, SOSLAND PUBLISHING, , PYLER, E.J. BAKING SCIENCE AND TECHNOLOGY XP002327340.
- "Journal of the Chinese Cereals an Oils Association, Vol. 9, No. 1, March 1994, pp. 23-29" (English Translation).